



05-19-06

1fn RECEIPT

TRANSMITTAL FORM (to be used for all correspondence after initial filing)		Application No.	09/846,452
		Filing Date	April 30, 2001
		First Named Inventor	Han C. Wen
		Art Unit	2663
		Examiner Name	Douong, Duc T.
Total Number of Pages in This Submission	11	Attorney Docket Number	3997P007

ENCLOSURES (check all that apply)		
<input checked="" type="checkbox"/> Fee Transmittal Form	<input type="checkbox"/> Drawing(s)	<input type="checkbox"/> After Allowance Communication to TC
<input type="checkbox"/> Fee Attached	<input type="checkbox"/> Licensing-related Papers	<input type="checkbox"/> Appeal Communication to Board of Appeals and Interferences
<input type="checkbox"/> Amendment / Response	<input type="checkbox"/> Petition	<input type="checkbox"/> Appeal Communication to TC (Appeal Notice, Brief, Reply Brief)
<input type="checkbox"/> After Final	<input type="checkbox"/> Petition to Convert a Provisional Application	<input type="checkbox"/> Proprietary Information
<input type="checkbox"/> Affidavits/declaration(s)	<input type="checkbox"/> Power of Attorney, Revocation Change of Correspondence Address	<input type="checkbox"/> Status Letter
<input type="checkbox"/> Extension of Time Request	<input type="checkbox"/> Terminal Disclaimer	<input checked="" type="checkbox"/> Other Enclosure(s) (please identify below):
<input type="checkbox"/> Express Abandonment Request	<input type="checkbox"/> Request for Refund	<div>Request to Correct Official Filing Receipt (8 pp.) Return Receipt Postcard</div>
<input type="checkbox"/> Information Disclosure Statement	<input type="checkbox"/> CD, Number of CD(s)	
<input type="checkbox"/> PTO/SB/08	<input type="checkbox"/> Landscape Table on CD	
<input type="checkbox"/> Certified Copy of Priority Document(s)	Remarks	
<input type="checkbox"/> Response to Missing Parts/Incomplete Application		
<input type="checkbox"/> Basic Filing Fee		
<input type="checkbox"/> Declaration/POA		
<input type="checkbox"/> Response to Missing Parts under 37 CFR 1.52 or 1.53		

SIGNATURE OF APPLICANT, ATTORNEY, OR AGENT	
Firm or Individual name	Lester J. Vincent, Reg. No. 31,460 BLAKELY, SOKOLOFF, TAYLOR & ZAFMAN LLP
Signature	
Date	May 17, 2006

CERTIFICATE OF MAILING/TRANSMISSION			
I hereby certify that this correspondence is being deposited with the United States Postal Service on the date shown below with sufficient postage as first class mail in an envelope addressed to: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.			
Typed or printed name	Sandra D. Espinoza		
Signature		Date	May 17, 2006



FEE TRANSMITTAL for FY 2005

Patent fees are subject to annual revision.

Complete if Known

Application Number	09/846,452
Filing Date	April 30, 2001
First Named Inventor	Han C. Wen
Examiner Name	Douong, Duc T.
Art Unit	2663
Attorney Docket No.	3997P007

☐ Applicant claims small entity status. See 37 CFR 1.27.

TOTAL AMOUNT OF PAYMENT (\$)

METHOD OF PAYMENT (check all that apply)

☐ Check ☐ Credit card ☐ Money Order ☒ None ☐ Other (please identify): _____

☒ Deposit Account Deposit Account Number: 02-2666 Deposit Account Name: Blakely, Sokoloff, Taylor & Zafman LLP

For the above-identified deposit account, the Director is hereby authorized to: (check all that apply)

☐ Charge fee(s) indicated below

☐ Charge fee(s) indicated below, except for the filing fee

☒ Charge any additional fee(s) or underpayment of fee(s) ☒ Credit any overpayments under 37 CFR §§ 1.16, 1.17, 1.18 and 1.20.

FEE CALCULATION

Large Entity		Small Entity		Fee Description	Fee Paid
Fee Code	Fee (\$)	Fee Code	Fee (\$)		
1051	130	2051	65	Surcharge - late filing fee or oath	
1052	50	2052	25	Surcharge - late provisional filing fee or cover sheet.	
2053	130	2053	130	Non-English specification	
1251	120	2251	60	Extension for reply within first month	
1252	450	2252	225	Extension for reply within second month	
1253	1,020	2253	510	Extension for reply within third month	
1254	1,590	2254	795	Extension for reply within fourth month	
1255	2,160	2255	1,080	Extension for reply within fifth month	
1401	500	2401	250	Notice of Appeal	
1402	500	2402	250	Filing a brief in support of an appeal	
1403	1,000	2403	500	Request for oral hearing	
1451	1,510	2451	1,510	Petition to institute a public use proceeding	
1460	130	2460	130	Petitions to the Commissioner	
1807	50	1807	50	Processing fee under 37 CFR 1.17(q)	
1806	180	1806	180	Submission of Information Disclosure Stmt	
1809	790	1809	395	Filing a submission after final rejection (37 CFR § 1.129(a))	
1810	790	2810	395	For each additional invention to be examined (37 CFR § 1.129(b))	
Other fee (specify) Request to Correct Official Filing Receipt					
SUBTOTAL (2)				(\$)	

SUBMITTED BY

Complete (if applicable)

Name (Print/Type)	Lester J. Vincent	Registration No. (Attorney/Agent)	31,460	Telephone	(408) 720-8300
Signature		Date	05/17/06		



Attorney Docket No.: 003997P007

Patent

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of:
Han C. Wen, et al.

Examiner: Duong, Duc T.

Art Unit: 2663

Serial No.: 09/846,452

Filed: April 30, 2001

For: METHOD OF ACCELERATING TCP FLOWS
IN COMMUNICATION NETWORKS WITH
DYNAMIC CONTROL

Assistant Commissioner for Patents
Office of Initial Patent Examination
Customer Service Center
P.O. Box 1450
Alexandria, VA 22313-1450

REQUEST TO CORRECT OFFICIAL FILING RECEIPT

Sir:

On June 26, 2001, the U.S. Patent and Trademark Office ("PTO") mailed us an Official Filing Receipt (a copy of which is enclosed) in connection with the above-mentioned patent application. Applicants mailed a request for corrected filing receipt on February 1, 2005. The PTO denied this request for corrected filing receipt on February 17, 2005, because applicants did not supply the relationship (continuation, divisional, or continuation-in-part) between the above-mentioned patent application and co-pending Application No. 09/539, 434, filed March 30, 2000, now issued as U.S. Patent No. 6,674,717, in an Application Data Sheet or amendment to the first page of the specification.

"Express Mail" mailing label number EV839870628US

Date of Deposit May 17, 2006

I hereby certify that this paper or fee is being deposited with the United States Postal Service

"Express Mail Post Office to Addressee" service under 37 CFR 1.10 on the date indicated above and is addressed to the Commissioner for Patents, PO Box 1450, Alexandria, Virginia 22313-1450.

Sandra Espinoza

(Typed or printed name of person mailing paper or fee)

(Signature of person mailing paper or fee)

The applicants submitted an amendment to the first page of the specification on September 16, 2005, that supplies the relationship (continuation-in-part).

The Official Filing Receipt currently reads in part as follows:

"Domestic Priority data as claimed by applicant."

Please correct the Official Filing Receipt so that it read in part as follows:

"Domestic Priority data as claimed by applicant:

Continuation-in-part of U.S. Patent Application No. 09/539,434, filed March 30, 2000."

The correction changes the Domestic Priority data to match the specification as amended on September 16, 2005 (a copy of which is enclosed along with the specification as filed).

Applicants respectfully request the PTO to identify the Domestic Priority data on an Updated Filing Receipt.

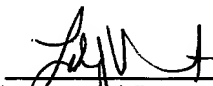
Please correct your records to reflect the above information and then forward us the Updated Filing Receipt.

Enclosed is a photocopy of page 2 of the specification as filed along with page 2 of the specification as amended on September 16, 2005, evidencing the priority claim.

If there are any additional charges, please charge Deposit Account No. 02-2666.

Respectfully submitted,
BLAKELY, SOKOLOFF, TAYLOR & ZAFMAN LLP

Dated: May 17, 2006



Lester J. Vincent
Reg. No. 31,460

12400 Wilshire Blvd.
Seventh Floor
Los Angeles, CA 90025-1026
(408) 947-8200



UNITED STATES PATENT AND TRADEMARK OFFICE

Network Physics
COMMISSIONER FOR PATENTS
UNITED STATES PATENT AND TRADEMARK OFFICE
WASHINGTON, D.C. 20231
www.uspto.gov

APPLICATION NUMBER	FILING DATE	GRP ART UNIT	FIL FEE REC'D	ATTY. DOCKET NO	DRAWINGS	TOT CLAIMS	IND CLAIMS
09/846,452	04/30/2001	2661	800	3997P007	3	25	3

CONFIRMATION NO. 4448

FILING RECEIPT



OC00000006229217

Tarek N. Fahmi
BLAKELY, SOKOLOFF, TAYLOR & ZAFMAN LLP
Seventh Floor
12400 Wilshire Boulevard
Los Angeles, CA 90025-1026

Date Mailed: 06/26/2001

Receipt is acknowledged of this nonprovisional Patent Application. It will be considered in its order and you will be notified as to the results of the examination. Be sure to provide the U.S. APPLICATION NUMBER, FILING DATE, NAME OF APPLICANT, and TITLE OF INVENTION when inquiring about this application. Fees transmitted by check or draft are subject to collection. Please verify the accuracy of the data presented on this receipt. If an error is noted on this Filing Receipt, please write to the Office of Initial Patent Examination's Customer Service Center. Please provide a copy of this Filing Receipt with the changes noted thereon. If you received a "Notice to File Missing Parts" for this application, please submit any corrections to this Filing Receipt with your reply to the Notice. When the USPTO processes the reply to the Notice, the USPTO will generate another Filing Receipt incorporating the requested corrections (if appropriate).

Applicant(s)

Han C. Wen, San Jose, CA;
Ian Adam, San Mateo, CA;
Minh Duong-van, Menlo Park, CA;
Tomas J. Pavel, San Jose, CA;
Mark Crane, Reno, NV;

RECEIVED

JUL 02 2001

BLAKELY, SOKOLOFF, TAYLOR & ZAFMAN
LOS ANGELES

Domestic Priority data as claimed by applicant

Foreign Applications

If Required, Foreign Filing License Granted 06/26/2001

Projected Publication Date: 10/31/2002

Non-Publication Request: No

Early Publication Request: No

Title

Method for accelerating TCP flows in communication networks with dynamic control

**ENTERED**

JUL 02 2001

STATUS DB-LA

Preliminary Class

370

Data entry by : ROBINSON, FELICIA

Team : OIPE

Date: 06/26/2001

**LICENSE FOR FOREIGN FILING UNDER
Title 35, United States Code, Section 184
Title 37, Code of Federal Regulations, 5.11 & 5.15**

GRANTED

The applicant has been granted a license under 35 U.S.C. 184, if the phrase "IF REQUIRED, FOREIGN FILING LICENSE GRANTED" followed by a date appears on this form. Such licenses are issued in all applications where the conditions for issuance of a license have been met, regardless of whether or not a license may be required as set forth in 37 CFR 5.15. The scope and limitations of this license are set forth in 37 CFR 5.15(a) unless an earlier license has been issued under 37 CFR 5.15(b). The license is subject to revocation upon written notification. The date indicated is the effective date of the license, unless an earlier license of similar scope has been granted under 37 CFR 5.13 or 5.14.

This license is to be retained by the licensee and may be used at any time on or after the effective date thereof unless it is revoked. This license is automatically transferred to any related applications(s) filed under 37 CFR 1.53(d). This license is not retroactive.

The grant of a license does not in any way lessen the responsibility of a licensee for the security of the subject matter as imposed by any Government contract or the provisions of existing laws relating to espionage and the national security or the export of technical data. Licensees should apprise themselves of current regulations especially with respect to certain countries, of other agencies, particularly the Office of Defense Trade Controls, Department of State (with respect to Arms, Munitions and Implements of War (22 CFR 121-128)); the Office of Export Administration, Department of Commerce (15 CFR 370.10 (j)); the Office of Foreign Assets Control, Department of Treasury (31 CFR Parts 500+) and the Department of Energy.

NOT GRANTED

No license under 35 U.S.C. 184 has been granted at this time, if the phrase "IF REQUIRED, FOREIGN FILING LICENSE GRANTED" DOES NOT appear on this form. Applicant may still petition for a license under 37 CFR 5.12, if a license is desired before the expiration of 6 months from the filing date of the application. If 6 months has lapsed from the filing date of this application and the licensee has not received any indication of a secrecy order under 35 U.S.C. 181, the licensee may foreign file the application pursuant to 37 CFR 5.15 (b).

PLEASE NOTE the following information about the Filing Receipt:

- The articles such as "a," "an" and "the" are not included as the first words in the title of an application. They are considered to be unnecessary to the understanding of the title.
- The words "new," "improved," "improvements in" or "relating to" are not included as first words in the title of an application because a patent application, by nature, is a new idea or improvement.
- The title may be truncated if it consists of more than 500 characters (letters and spaces combined).
- The docket number allows a maximum of 25 characters.
- If your application was submitted under 37 CFR 1.10, your filing date should be the "date in" found on the Express Mail label. If there is a discrepancy, you should submit a request for a corrected Filing Receipt along with a copy of the Express Mail label showing the "date in."
- The title is recorded in sentence case.

Any corrections that may need to be done to your Filing Receipt should be directed to:

Assistant Commissioner for Patents
Office of Initial Patent Examination
Customer Service Center
Washington, DC 20231



METHOD FOR ACCELERATING TCP FLOWS IN COMMUNICATION NETWORKS WITH DYNAMIC CONTROL

RELATED APPLICATION

[0001] The present application is related to and hereby claims the priority benefit of co-pending Application No. 09/539,434, entitled "METHOD FOR REDUCING PACKET LOSS AND INCREASING INTERNET FLOW BY FEEDBACK CONTROL," filed March 30, 2000 and assigned to the assignee of the present application.

FIELD OF THE INVENTION

[0002] The present invention relates to a scheme for reducing fetch time in a communication network, in part based on recognizing the presence or absence of congestion in the network.

BACKGROUND

[0003] Many communication networks, such as the Internet, rely on packet switching technologies (e.g., X.25, frame relay, asynchronous transfer mode, etc.) to transport variable or uniform blocks (usually termed packets or cells) of data between nodes. The term packet will be used herein to collectively refer to any such block of information. Such networks generally perform two major functions: routing and congestion control. The object of routing is to deliver, correctly and sometimes in sequence, the packets from a source to a destination. The object of congestion control is to maintain the number of packets within the network (or a region or sub-network thereof) below a level at which queuing delays become excessive. Due to finite resources, packets may be dropped rather than queued.

Amendments to the Specification:

Please replace paragraph [0001] with the following rewritten paragraph:

“The present application is related to and hereby claims the priority benefit of and is a continuation-in-part of co-pending U.S. Patent Application No. 09/539,434, entitled “METHOD FOR REDUCING PACKET LOSS AND INCREASING INTERNET FLOW BY FEEDBACK CONTROL,” filed March 30, 2000 and assigned to the assignee of the present application.”

Please replace paragraph [0039] with the following rewritten paragraph:

“To discriminate traffic flows (or connections, etc.) that are congested from those that are uncongested (or relatively uncongested), the control node monitors packet loss for the traffic stream (or connection, etc.) of interest. If after a designated time period (say between 0 and 100 seconds, preferably between 30 and 100 seconds, more preferably between 50 and 100 seconds, and even more preferably between 60 and 100 seconds) no packet losses have been noted for that traffic flow (connection, etc.), the control node can declare the subject traffic flow (connection, etc.) to be uncongested. This type of monitoring (and the subsequent control) can be provided on a stream-by-stream, connection-by-connection, link-by-link, destination-by-destination or other basis. Alternatively, predictions of congestion conditions may be based on results obtained by monitoring packet round trip times in the network. A complete description of such a process is provided in co-pending and commonly owned U.S. Patent Application No. 09/854,321, entitled “Method for Determining Network Congestion and Link Capacities”, filed May 11, 2001, Attorney Docket No. 003997.P010, which is incorporated herein by reference. Briefly, it has been found that there is an intimate relationship between packet loss and packet round trip time in a network such that measurements of this round trip time can be used to determine congestion conditions. Further methods of predicting such conditions are disclosed in commonly-owned U.S. Patent Application No. 09/846,450, entitled “Method for Dynamical Identification of Network Congestion Characteristics”, filed April 30, 2001, Attorney Docket No. 003997.P008, which is also incorporated herein by reference.”